(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 2 447 372 A8**

(12) **CORRECTED EUROPEAN PATENT APPLICATION**

(15) Correction information:
Corrected version no 1 (W1 A3)
Corrections, see
Bibliography INID code(s) 22

(48) Corrigendum issued on:
22.08.2012 Bulletin 2012/34

(88) Date of publication A3:
30.05.2012 Bulletin 2012/22

(43) Date of publication A2:
02.05.2012 Bulletin 2012/18

(21) Application number: **11008296.3**

(22) Date of filing: **10.07.2006**

(51) Int Cl.:
C12P 21/08 *(2006.01)* ***C07K 16/00*** *(2006.01)*
A61K 39/395 *(2006.01)* ***G01N 33/53*** *(2006.01)*
G01N 33/574 *(2006.01)* ***C12P 21/04*** *(2006.01)*
C07H 21/04 *(2006.01)*

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

(30) Priority: **08.07.2005 US 697442 P**
15.02.2006 US 773310 P

(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:
06774580.2 / 1 920 065

(71) Applicant: **Biogen Idec MA Inc.**
Cambridge, MA 02142 (US)

(72) Inventors:
- **Violette, Sheila M**
Lexington, MA 02420 (US)
- **Koopman, Louise A**
Brookline, MA 02445 (US)
- **Simon, Kenneth J**
Cambridge, MA 02141 (US)
- **Weinreb, Paul H**
Andover, MA 01810 (US)
- **Van Vlijmen, Herman**
2800 BE Mechelen (NL)
- **Saldanha, Jose**
Enfield, Middlesex EN1 3BD (GB)
- **Luguvskoy, Alexey A**
Woburn, MA 01801 (US)

(74) Representative: **Richards, William John et al**
Bryer, Shelley, John Amor
Greenwood LLP
7 Gay Street
Bath BA1 2PH (GB)

(54) **Anti alpha v beta 6 antibodies and uses thereof**

(57) The present invention is in the fields of cell biology, immunology and oncology. Specifically, the invention relates to humanized antibodies that recognizes v 6 integrins which comprises a variable region of nonhuman origin and at least -a portion of an immunoglobulin of human origin. The invention also relates to processes for their preparation, to pharmaceutical compositions comprising them and to methods of treating various diseases by administering humanized anti- v 6 antibodies. The invention also relates to the identification of differential expression of the integrin $\alpha v\beta 6$ on the surfaces of tumor cells and tissues, the use of this differential expression in determining the metastatic potential of tumor cells, and methods of diagnosis and treatment/prevention of tumor metastasis and for elimination of residual metastatic tumor cells using ligands, particularly antibodies, that bind to integrin $\alpha v\beta 6$.

EP 2 447 372 A8

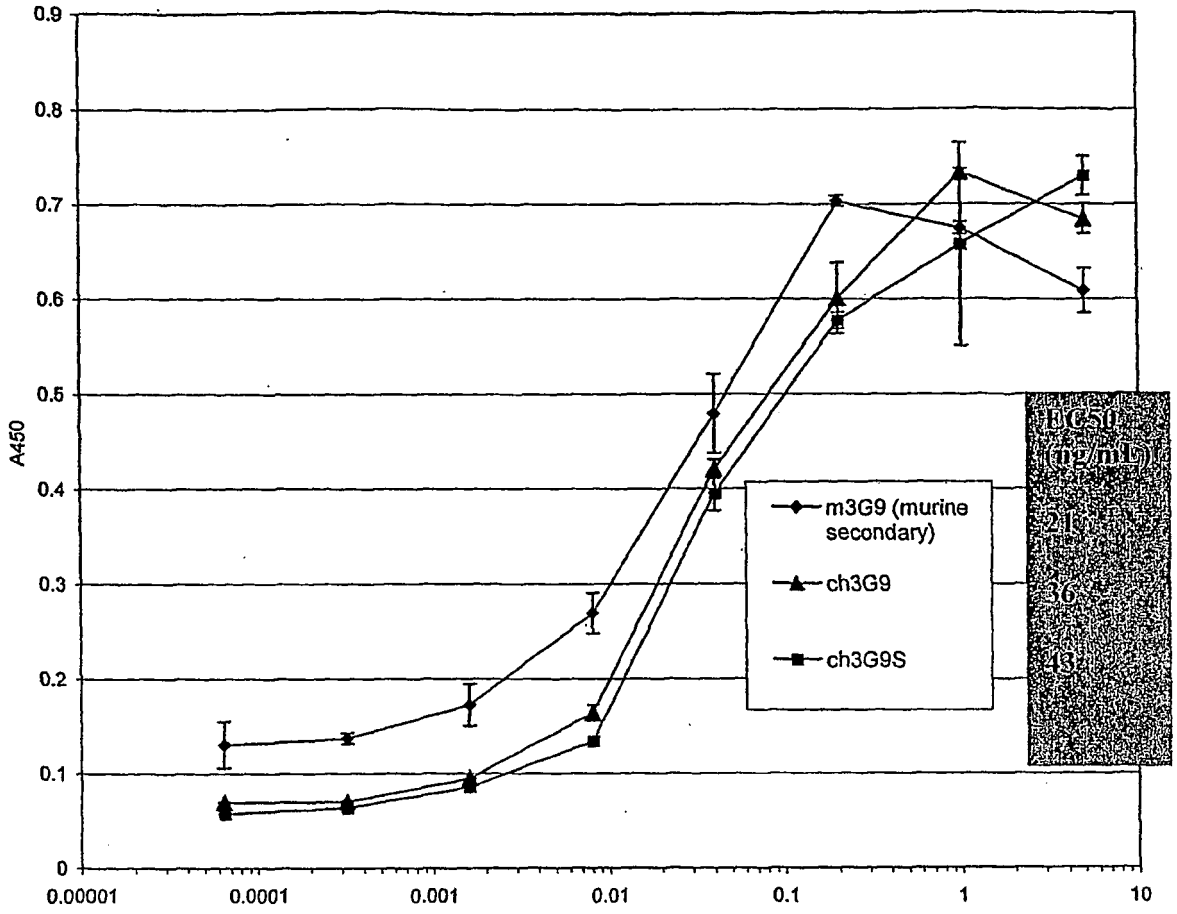

Figure 1. Binding ELISA of purified and chimerized 3G9 antibody variants to $\alpha_v\beta_6$.